



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/609,414 | 07/01/2003 | Shinji Takayanagi | 0505-1207P | 9457 |
| 2292 | 7590 | 09/21/2005 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | CULBRETH, ERIC D | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3616 | |

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/609,414

Applicant(s)

TAKAYANAGI ET AL.

Examiner

Eric Culbreth

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/19/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. The examiner notes the status inquiry filed 2/2/05 and apologizes for not responding; however, the Office does not currently make the examiners aware a status inquiry has been filed.

Information Disclosure Statement

2. In order to ensure proper consideration, the applicants should file a copy of the foreign references cited in paragraphs [0003] – [0004] in their next correspondence, as these references are not readily available to the examiner.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the features of claims 5 and 15 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to because of the following informalities. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

- a. Reference numeral 218 does not refer to a joint in Figure 19 (paragraph [0007], line 4).
- b. In line 2 of paragraph [0051], “winker 43” is not clear and is idiomatic (“blinker 43” or “signal light 43” is recommended).
- c. Regarding paragraph [0063], lines 1-3, caliper 96 is not attached to part 95 on the left side of Figure 7; the caliper structure and its operation is not understood as illustrated and described.
- d. In fact, paragraph [0063], lines 1-3 state the calipers 96 are attached to part 95, but lines 4-5 of the same paragraph state the calipers are included in the devices 97; not of this is clear from Figure 7.
- e. Contrary to paragraph [0066], lines 7-8, reference numeral 107 is not in Figure 8A; in fact, the reference numeral already refers to a bolt of the invention in Figure 7.
- f. In Figure 8A, line b-b should be 8B-8B, as a section line should be labeled for the figure it represents.
- g. Noting paragraph [0072], reference numeral 134 is not a pipe in Figure 9 (apparently, 134 should be 144; see paragraph [0073]).
- h. In paragraph [0081], line 2, “.1” should be “ θ 1” (the symbol theta is used in the drawings).
- i. Similarly, in paragraph [0087], “.2” should be “ θ 2”.

j. From the drawings, it is not clear how housing 111 works to bias the frame vertically (from the disclosure and drawings, housing 111, and pin 116 appear to be attached only to frame members 54 and 34 in Figure 8A, for instance, which frame members are rigidly connected as seen in Figure 9; hence, when the frame tilts in, say, Figure 8C, it is not clear from the disclosed illustrated structure what makes member 124 stay vertical).

Specification

5. The abstract of the disclosure is objected to because the rear wheels are not mounted to “tip ends” of the suspension arms (note Figure 7, where the wheel is not on a tip end of suspension arm 72), because it is not clear from the disclosure how the oscillation member permits leftward and rightward oscillation of the body frame relative to the side of the suspension arms (as noted above, it is not clear from the disclosure how the housing 111 works), and because the last three lines of the abstract are not understood because the subject matter in this text is not discussed in the specification. Correction is required. See MPEP § 608.01(b).

6. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: There is no support in the specification for claims 5 and 15.

7. The disclosure is objected to because of the following informalities:
- a. Paragraph [0004], lines 1-2 are an incomplete sentence (adjectives are missing).
 - b. Paragraph [0006], lines 5-6 and paragraph [0008], line 4 are idiomatic vague phrases ("follow up the ruggedness").
 - c. Paragraph [0007] is an incomplete sentence.
 - d. In paragraph [0014], line 2 and [0015], line 1 "an" should precede "oscillation".
 - e. In paragraph [0062], line 5 and line 6, "is" should be "are" (both occurrences).
 - f. Paragraph [0062], line 8 is unclear; apparently, "form" should be deleted.
 - g. Paragraph [0065] is an incomplete sentence.
 - h. In paragraph [0081], line 8 "attendant" should be "rider".
 - i. In paragraph [0083], line 4 "with" should apparently be "about".
- Appropriate correction is required.

Claim Objections

8. Claims 9 and 19 are objected to because of the following informalities: These claims are exact duplicates of claims 7 and 17, respectively. Appropriate correction is required.

Claim Rejections - 35 USC § 112

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claims 1 and 11, it is not clear how the oscillation mechanism is between the vehicle body frame and rear suspension (as noted above, housing 111 and the members inside would appear to have no effect on the suspension, as they are all attached to rigidly attached frame members 54 and 32 only; the housing 111, pin 116 and member 124 are not disclosed or illustrated as attached to the suspension arms 71, 72. Paragraph [0066] states that the housing or case 111 is attached to member 32B, and paragraph [0068] states that the rubbers 112 are compressed when the frame is slanted, but it is not clear from the disclosure why the damper rubbers 112 would be compressed.

The subject matter of claims 5 and 15 is not clear because the features or limitations in those claims are not discussed or illustrated.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 1, line 4 and claim 11, line 5, it is not accurate to recite rear wheels mounted on tip ends of the suspension arms (note Figure 7, where the wheel would not be on a tip or an end of U-shaped arm 72).

b. In claim 13, lines 3-4 reciting "not all of the links have lengths that are equal" is nonpositive (it has not previously been recited that any of the links are equal) and it is a negative limitation.

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

14. Claims 1, 4, 11 and 14 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by Prince (US Patent 4,887,829).

Prince discloses a motortricycle (a three wheeled motorized vehicle) comprising a rear suspension 18, 23 having suspension arms 17, 25 swingably mounted to a vehicle body frame 10. Wheels 16, 27 are mounted to the tip ends of the left and right suspension arms as indefinitely recited, and an oscillation mechanism 20, 22 permits leftward and rightward oscillation of the vehicle frame relative to the rear suspension. The oscillation mechanism is provided between the suspension and frame, and engine 28 for driving the left and right wheels is supported on the vehicle body frame in Figure 3. The engine is capable of oscillating together with the vehicle body frame (claims 1 and 11). Regarding claims 4 and 14, as seen in Figure 3, the vehicle body frame 10 surrounds front and rear and upper and lower sides of the engine, and at least a portion of a rear portion of the vehicle body is comprised of a single vertical pipe.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

17. Claims 2-3, 6, 12-13, and 16 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Morita et al (US Patent 4,836,324).

Morita et al discloses a rubber mount or bush at 13 supporting the engine 2 as well as unequal length links 8b, 11 supporting the engine on the frame. At the rear, bridge member 6 is j-shaped. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Prince to include a J-shaped tube at the rear and unequal length links and a rubber mount supporting the engine in order to use a structurally equivalent shape of pipe at the rear of the vehicle and to conventionally support the engine while reducing vibration. In the combination the j-shaped pipe at the rear would be a single tube in keeping with Prince, the primary reference.

Allowable Subject Matter

18. Claims 7-10 and 17-20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

19. Claims 5 and 15 were so indefinite due to the nonenabling disclosure that no determination of patentability could be made on these claims.

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Martin, II (US Patent 4,478,305), Van Der Brink et al (US006435522B1) and Vidal (US005611555A) cited to show an engine that oscillates with the frame.

Sato et al (US Patent 4,360,224) shows a rubber mount 13 for a wheel suspension.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Culbreth whose telephone number is 571/272-6668. The examiner can normally be reached on Monday-Thursday, 9:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 571/272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Eric Culbreth
Primary Examiner
Art Unit 3616

ec